CLAIMS

What is claimed is:

1. An apparatus for sampling air comprising:

a collar having an interior and an exterior;

a clamp affixed to said collar; and

a hose fitting affixed to said collar.

2. The apparatus according to claim 1 wherein said collar is made in part of aluminum.

3. The apparatus according to claim 1 wherein said collar further comprises an upstream end and a downstream end, and wherein said clamp is affixed at the upstream end of said collar and wherein said hose fitting is affixed at the downstream end of said collar.

4. The apparatus according to claim 1 further comprising at least one sample port disposed on said collar.

5. The apparatus according to claim 1 wherein said collar further defines a lip whereby said lip retains said clamp on said collar while said clamp is free to rotate around said collar.

6. The apparatus according to claim 5 further comprising a gasket disposed between said lip and said clamp.

7. The apparatus according to claim 1 wherein said hose fitting further comprises a mating surface.

8. The apparatus according to claim 1 wherein said hose fitting is affixed to said collar so as to provide a substantially airtight seal therebetween.

9. An apparatus for sampling air from a high volume air source comprising:

a collar;

a hose having two ends, a first end positioned at a high volume air source and a second end affixed to said collar;

a canister affixed to said collar;

a vacuum source; and

tubing providing vacuum between said vacuum source and said canister.

10. The apparatus according to claim 9 wherein said collar further comprises an upstream end and a downstream end and wherein the second end of said hose is affixed to the collar upstream end and said canister is affixed to the the collar downstream end.

11. The apparatus according to claim 9 wherein said collar is generally hollow and cylindrical in shape.

12. The apparatus according to claim 9 wherein said collar sealingly engages with said canister.

13. The apparatus according to claim 9 wherein said collar is comprised in part of aluminum.

14. The apparatus according to claim 9 wherein said collar is comprised in part of aluminum alloy.

15. The apparatus according to claim 9 further comprising at least one sample port disposed on said collar.

16. A method for sampling impurities from a high volume air source comprising the steps of:

gathering an air sample at a high volume air source;

delivering the air sample to a collar;

attaching said collar to a canister; and

pulling a vacuum through said canister.

17. The method according to claim 16 further comprising the step of connecting said canister to a vacuum pump with tubing.

18. The method according to claim 16 further comprising the step of collecting impurities present in the air at the canister.

19. The method according to claim 16 further comprising the step of reducing the temperature and pressure of the air sample at a pressure reduction vessel.

20. The method according to claim 16 further comprising the step of positioning one end of a hose with two ends at a high volume air source.

21. The method according to claim 16 further comprising the step of positioning the second end of a hose with two ends at a collar.

22. The method according to claim 16 wherein the step of attaching said collar to a canister includes providing a substantially airtight seal between said collar and said canister.

23. The method according to claim 16 further comprising the step of sampling air temperature at a sample port.

24. The method according to claim 16 further comprising the step of sampling air pressure at a sample port.

25. The method according to claim 16 wherein said hose is affixed to said collar in a substantially airtight seal.